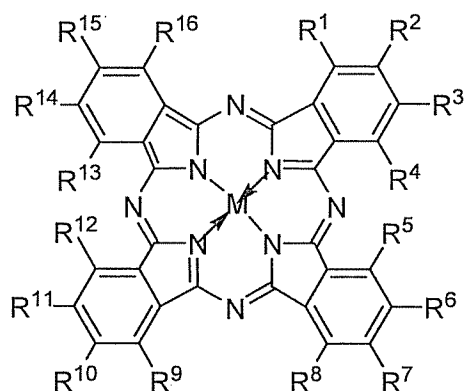


1-2. (Cancelled)

3. (Currently amended) A pharmaceutical composition of claim 1, wherein the for topical administration, comprising a phthalocyanine that has a structure of formula (II) or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier,



(II)

wherein M is  $(G)_a Y[(OSi(CH_3)_2(CH_2)_b N_c(R')_d(R'')_e)X_g]_p$ ;

Y is selected from Si, Al, Ga, Ge, or Sn;

R' is selected from H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>4</sub>H<sub>9</sub>, C<sub>4</sub>H<sub>8</sub>NH, C<sub>4</sub>H<sub>8</sub>N, C<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>, C<sub>4</sub>H<sub>8</sub>S, C<sub>4</sub>H<sub>8</sub>O, C<sub>4</sub>H<sub>8</sub>Se,

OC(O)CH<sub>3</sub>, OC(O), CS, CO, CSe, OH, C<sub>4</sub>H<sub>8</sub>N(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>0</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

R'' is selected from H, SO<sub>2</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>, C(S)NHC<sub>6</sub>H<sub>11</sub>O<sub>5</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>0</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

G is selected from OH and CH<sub>3</sub>;

X is selected from hydrobromide, hydrochloride, sulfate, bisulfate, phosphate, nitrate, acetate, pyruvate, valerate, oleate, palmitate, stearate, laurate, benzoate, lactate, phosphate, tosylate, citrate, maleate, fumarate, succinate, tartrate, naphthylate, mesylate, glucoheptonate, lactobionate, and laurylsulphonate forming anions;

a is 0 or 1;

b is an integer from 2 to 12;

c is 0 or 1;

d is an integer from 0 to 3;

e is an integer from 0 to 2;

f is 1 or 2;

g is 0 or 1;

n is an integer from 1 to 12;

o is an integer from 1 to 11;

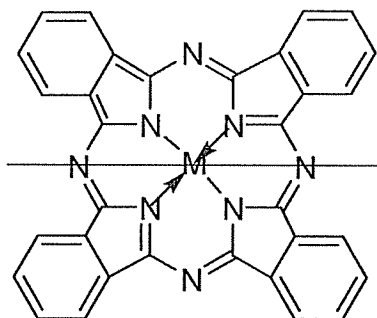
p is 1 or 2 wherein M is a diamagnetic metal ion optionally complexed with or covalently bound to one or two axial ligands, wherein the metal ion is coordinated to the phthalocyanine moiety; and

$R^1 - R^{16}$  are each independently selected from hydrogen, halogen, nitro, cyano, hydroxy, thiol, amino, carboxy, aryl, heteroaryl, carbocyclyl, heterocyclyl,  $C_{1-20}$ alkyl,  $C_{1-20}$ alkenyl,  $C_{1-20}$ alkynyl,  $C_{1-20}$ alkoxy,  $C_{1-20}$ acyl,  $C_{1-20}$ alkylcarbonyloxy,  $C_{1-20}$ aralkyl,  $C_{1-20}$ hetaralkyl,  $C_{1-20}$ carbocyclylalkyl,  $C_{1-20}$ heterocyclylalkyl,  $C_{1-20}$ aminoalkyl,  $C_{1-20}$ alkylamino,  $C_{1-20}$ thioalkyl,  $C_{1-20}$ alkylthio,  $C_{1-20}$ hydroxyalkyl,  $C_{1-20}$ alkyloxycarbonyl,  $C_{1-20}$ alkylaminocarbonyl,  $C_{1-20}$ alkylcarbonylamino,  $C_{1-10}$ alkyl-Z- $C_{1-10}$ alkyl;

$R^{17}$  is selected from hydrogen,  $C_{1-20}$ acyl,  $C_{1-20}$ alkyl, and  $C_{1-20}$ aralkyl; and

Z is selected from S,  $NR^{17}$ , and O.

4. **(Currently Amended)** A The pharmaceutical composition of claim [[1]] 3, wherein  $R^1 - R^{16}$  are hydrogen ~~the phthalocyanine has a structure of Formula (III) or a pharmaceutically acceptable salt thereof~~



(III)

wherein M is (G)<sub>a</sub>Y[(OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>b</sub>N<sub>e</sub>(R')<sub>d</sub>(R'')<sub>e</sub>(R''')<sub>f</sub>X<sub>g</sub>)<sub>p</sub>];

Y is selected from Si, Al, Ga, Ge, or Sn;

R' is selected from H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>4</sub>H<sub>9</sub>, C<sub>4</sub>H<sub>8</sub>NH, C<sub>4</sub>H<sub>8</sub>N, C<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>, C<sub>4</sub>H<sub>8</sub>S, C<sub>4</sub>H<sub>8</sub>O, C<sub>4</sub>H<sub>8</sub>Se, OC(O)CH<sub>3</sub>, OC(O), CS, CO, CSe, OH, C<sub>4</sub>H<sub>8</sub>N(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>6</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

R'' is selected from H, SO<sub>2</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>, C(S)NHC<sub>6</sub>H<sub>11</sub>O<sub>5</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>6</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

G is selected from OH and CH<sub>3</sub>;

X is selected from I, F, Cl, or Br;

a is 0 or 1;

b is an integer from 2 to 12;

e is 0 or 1;

d is an integer from 0 to 3;

e is an integer from 0 to 2;

f is 1 or 2;

g is 0 or 1;

n is an integer from 1 to 12;

o is an integer from 1 to 11; and

p is 1 or 2.

5. **(Original)** A pharmaceutical composition of claim 4, wherein M is selected from  $\text{AlOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ ;  $\text{AlOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_3^+\text{T}^-$ ;  $\text{CH}_3\text{SiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_3^+\text{T}^-$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_3^+\text{T}^-]_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NH}_2]_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NHSO}_2\text{CH}_3]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NHSO}_2\text{CH}_3$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_2\text{CH}_3)(\text{CH}_2)_2\text{N}(\text{CH}_3)_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NHCSNHC}_6\text{H}_{11}\text{O}_5]_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{OCOCH}_3$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{OH}$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_2\text{CH}_3)(\text{CH}_2)_2\text{N}(\text{CH}_3)_2]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{O}$ ;  $\text{AlOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}^+(\text{CH}_3)_2(\text{CH}_2)_{11}\text{CH}_3\text{I}^-$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_8\text{N}(\text{CH}_3)_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{O}]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{S}$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_2)_3(\text{CH}_3)_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NCS}$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}[(\text{CH}_2)_3\text{N}(\text{CH}_3)_2]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{NCH}_3$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{NCH}_3]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{N}(\text{CH}_2)_3\text{CH}_3$ ; and  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{NH}]_2$ .

6. **(Original)** A pharmaceutical composition of claim 5, wherein M is  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ .

7. **(Cancelled)**

8. **(Cancelled)**

9. **(Original)** A pharmaceutical composition of claim 8, wherein the phthalocyanine is formulated as a salt selected from hydrochloride and pyruvate.

10. **(Original)** A pharmaceutical composition of claim 9, wherein the phthalocyanine is formulated as a hydrochloride salt.

11. **(Original)** A pharmaceutical composition of claim 10, wherein the phthalocyanine is formulated as a pyruvate salt.

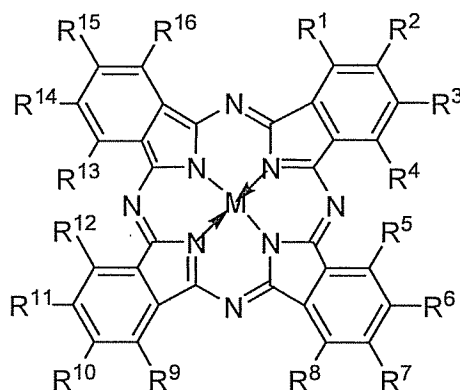
12-15. **(Canceled)**

16. **(Currently amended)** ~~A pharmaceutical composition of claim 14~~ A method for treating epithelial cancer or other epithelial cell abnormalities, comprising

(i) topically administering a phthalocyanine pharmaceutical composition to an epithelial surface; and

(ii) irradiating the epithelial surface,

wherein the phthalocyanine has a structure of formula (II) or a pharmaceutically acceptable salt thereof



(II)

wherein M is  $(G)_a Y[(OSi(CH_3)_2(CH_2)_b N_c(R')_d(R'')_e)X_g]_p$ :

Y is selected from Si, Al, Ga, Ge, or Sn;

R' is selected from H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>4</sub>H<sub>9</sub>, C<sub>4</sub>H<sub>8</sub>NH, C<sub>4</sub>H<sub>8</sub>N, C<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>, C<sub>4</sub>H<sub>8</sub>S, C<sub>4</sub>H<sub>8</sub>O, C<sub>4</sub>H<sub>8</sub>Se,

OC(O)CH<sub>3</sub>, OC(O), CS, CO, CSe, OH, C<sub>4</sub>H<sub>8</sub>N(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>o</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

R'' is selected from H, SO<sub>2</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>, C(S)NHC<sub>6</sub>H<sub>11</sub>O<sub>5</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>o</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

G is selected from OH and CH<sub>3</sub>;

X is selected from hydrobromide, hydrochloride, sulfate, bisulfate, phosphate, nitrate, acetate, pyruvate, valerate, oleate, palmitate, stearate, laurate, benzoate, lactate, phosphate, tosylate, citrate, maleate, fumarate, succinate, tartrate, naphthylate, mesylate, glucoheptonate, lactobionate, and laurylsulphonate forming anions;

a is 0 or 1;

b is an integer from 2 to 12;

c is 0 or 1;

d is an integer from 0 to 3;

e is an integer from 0 to 2;

f is 1 or 2;

g is 0 or 1;

n is an integer from 1 to 12;

o is an integer from 1 to 11;

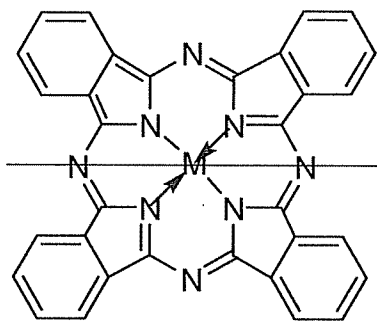
p is 1 or 2 wherein M is a diamagnetic metal ion optionally complexed with or covalently bound to one or two axial ligands, wherein the metal ion is coordinated to the phthalocyanine moiety; and

$R^1 - R^{16}$  are each independently selected from hydrogen, halogen, nitro, cyano, hydroxy, thiol, amino, carboxy, aryl, heteroaryl, carbocyclyl, heterocyclyl,  $C_{1-20}$ alkyl,  $C_{1-20}$ alkenyl,  $C_{1-20}$ alkynyl,  $C_{1-20}$ alkoxy,  $C_{1-20}$ acyl,  $C_{1-20}$ alkylcarbonyloxy,  $C_{1-20}$ aralkyl,  $C_{1-20}$ hetaralkyl,  $C_{1-20}$ carbocyclylalkyl,  $C_{1-20}$ heterocyclylalkyl,  $C_{1-20}$ aminoalkyl,  $C_{1-20}$ alkylamino,  $C_{1-20}$ thioalkyl,  $C_{1-20}$ alkylthio,  $C_{1-20}$ hydroxyalkyl,  $C_{1-20}$ alkyloxycarbonyl,  $C_{1-20}$ alkylaminocarbonyl,  $C_{1-20}$ alkylcarbonylamino,  $C_{1-10}$ alkyl-Z- $C_{1-10}$ alkyl;

$R^{17}$  is selected from hydrogen,  $C_{1-20}$ acyl,  $C_{1-20}$ alkyl, and  $C_{1-20}$ aralkyl; and

Z is selected from S,  $NR^{17}$ , and O.

17. (Currently amended) ~~[[A]]~~ The method of claim ~~[[14]]~~ 16, wherein  $R^1 - R^{16}$  are ~~hydrogen~~ the phthalocyanine has a structure of Formula (III) or a pharmaceutically acceptable salt thereof



(III)

wherein M is  $(G)_a Y[(OSi(CH_3)_2(CH_2)_b N_e(R')_d(R'')_e)_f X_g]_p$ ;

Y is selected from Si, Al, Ga, Ge, or Sn;

$R'$  is selected from H,  $CH_3$ ,  $C_2H_5$ ,  $C_4H_9$ ,  $C_4H_8NH$ ,  $C_4H_8N$ ,  $C_4H_8NCH_3$ ,  $C_4H_8S$ ,  $C_4H_8O$ ,  $C_4H_8Se$ ,  $OC(O)CH_3$ ,  $OC(O)$ , CS, CO, CSe, OH,  $C_4H_8N(CH_2)_3CH_3$ ,  $(CH_2)_2N(CH_3)_2$ ,

$(CH_2)_n N((CH_2)_6(CH_3))_2$ , and an alkyl group having from 1 to 12 carbon atoms;

$R''$  is selected from H,  $SO_2CH_3$ ,  $(CH_2)_2N(CH_3)_2$ ,  $(CH_2)_{11}CH_3$ ,  $C(S)NHC_6H_{11}O_5$ ,

$(CH_2)_n N((CH_2)_6(CH_3))_2$ , and an alkyl group having from 1 to 12 carbon atoms;

G is selected from OH and  $CH_3$ ;

X is selected from I, F, Cl, or Br;

a is 0 or 1;

b is an integer from 2 to 12;

e is 0 or 1;

d is an integer from 0 to 3;

e is an integer from 0 to 2;

f is 1 or 2;

g is 0 or 1;

n is an integer from 1 to 12;

~~o~~ is an integer from 1 to 11; and  
~~p~~ is 1 or 2.

18. **(Original)** A method of claim 17, wherein M is selected from  
AlOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>; AlOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>3</sub><sup>+</sup>T<sup>-</sup>; CH<sub>3</sub>SiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>;  
HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>3</sub><sup>+</sup>T<sup>-</sup>;  
Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>3</sub><sup>+</sup>T<sup>-</sup>]<sub>2</sub>; Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>NH<sub>2</sub>]<sub>2</sub>; Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>NHSO<sub>2</sub>CH<sub>3</sub>]<sub>2</sub>;  
HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>NHSO<sub>2</sub>CH<sub>3</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>2</sub>CH<sub>3</sub>)(CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>;  
Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>NHCSNHC<sub>6</sub>H<sub>11</sub>O<sub>5</sub>]<sub>2</sub>; Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>]<sub>2</sub>;  
HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>OCOCH<sub>3</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>OH;  
Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>2</sub>CH<sub>3</sub>)(CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>]<sub>2</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>O;  
AlOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N<sup>+</sup>(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>I<sup>-</sup>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>8</sub>N(CH<sub>3</sub>)<sub>2</sub>;  
Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>O]<sub>2</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>S;  
HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>2</sub>)<sub>3</sub>(CH<sub>3</sub>)<sub>2</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NCS;  
HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N[(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>]<sub>2</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>;  
Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>]<sub>2</sub>; HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>N(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>; and  
Si[OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>NC<sub>4</sub>H<sub>8</sub>NH]<sub>2</sub>.

19. **(Original)** A method of claim 18, wherein M is HOSiOSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>N(CH<sub>3</sub>)<sub>2</sub>.

20. **(Cancelled)**

21. **(Cancelled)**

22. **(Previously presented)** A method of claim 15, wherein the phthalocyanine is formulated as a salt selected from hydrochloride and pyruvate.

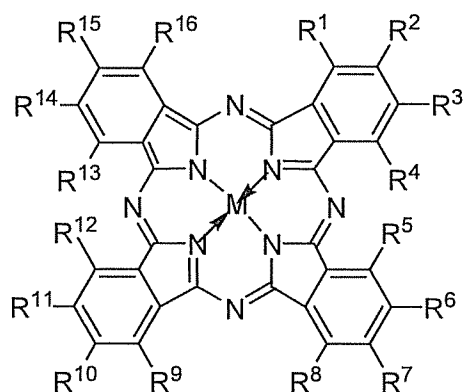
23. **(Currently amended)** ~~A pharmaceutical composition~~ The method of claim 22, wherein the phthalocyanine is formulated as a hydrochloride salt.



24. **(Original)** A method of claim 22, wherein the phthalocyanine is formulated as a pyruvate salt.

25. **(Cancelled)**

26. **(Currently amended)** A pharmaceutically acceptable salt of a compound having a structure of formula (II) ~~or a pharmaceutically acceptable salt thereof~~



(II)

wherein M is (G)<sub>a</sub>Y[(OSi(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>b</sub>Nc(R')<sub>d</sub>(R'')<sub>e</sub>X<sub>g</sub>]<sub>p</sub>;

Y is selected from Si, Al, Ga, Ge, or Sn;

R' is selected from H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>4</sub>H<sub>9</sub>, C<sub>4</sub>H<sub>8</sub>NH, C<sub>4</sub>H<sub>8</sub>N, C<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>, C<sub>4</sub>H<sub>8</sub>S, C<sub>4</sub>H<sub>8</sub>O, C<sub>4</sub>H<sub>8</sub>Se,

OC(O)CH<sub>3</sub>, OC(O), CS, CO, CSe, OH, C<sub>4</sub>H<sub>8</sub>N(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>0</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

R'' is selected from H, SO<sub>2</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>, C(S)NHC<sub>6</sub>H<sub>11</sub>O<sub>5</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>0</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

G is selected from OH and CH<sub>3</sub>;

X is selected from hydrobromide, hydrochloride, sulfate, bisulfate, phosphate, nitrate, acetate,

pyruvate, valerate, oleate, palmitate, stearate, laurate, benzoate, lactate, phosphate,

tosylate, citrate, maleate, fumarate, succinate, tartrate, naphthylate, mesylate,

glucoheptonate, lactobionate, and laurylsulphonate forming anions;

a is 0 or 1;

b is an integer from 2 to 12;

c is 0 or 1;

d is an integer from 0 to 3;

e is an integer from 0 to 2;

f is 1 or 2;

g is 0 or 1;

n is an integer from 1 to 12;

o is an integer from 1 to 11; and

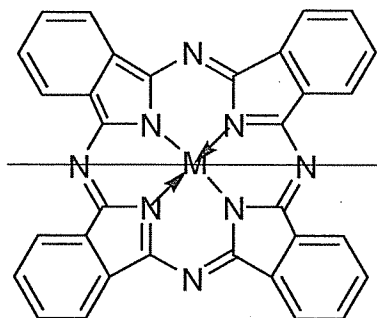
p is 1 or 2 wherein M is a diamagnetic metal ion optionally complexed with or covalently bound to one or two axial ligands, wherein the metal ion is coordinated to the phthalocyanine moiety; and

$R^1 - R^{16}$  are each independently selected from hydrogen, halogen, nitro, cyano, hydroxy, thiol, amino, carboxy, aryl, heteroaryl, carbocyclyl, heterocyclyl,  $C_{1-20}$ alkyl,  $C_{1-20}$ alkenyl,  $C_{1-20}$ alkynyl,  $C_{1-20}$ alkoxy,  $C_{1-20}$ acyl,  $C_{1-20}$ alkylcarbonyloxy,  $C_{1-20}$ aralkyl,  $C_{1-20}$ hetaralkyl,  $C_{1-20}$ carbocyclylalkyl,  $C_{1-20}$ heterocyclylalkyl,  $C_{1-20}$ aminoalkyl,  $C_{1-20}$ alkylamino,  $C_{1-20}$ thioalkyl,  $C_{1-20}$ alkylthio,  $C_{1-20}$ hydroxyalkyl,  $C_{1-20}$ alkyloxycarbonyl,  $C_{1-20}$ alkylaminocarbonyl,  $C_{1-20}$ alkylcarbonylamino,  $C_{1-10}$ alkyl-Z- $C_{1-10}$ alkyl;

$R^{17}$  is selected from hydrogen,  $C_{1-20}$ acyl,  $C_{1-20}$ alkyl, and  $C_{1-20}$ aralkyl; and

Z is selected from S,  $NR^{17}$ , and O.

27. **(Currently amended)** [[A]] The pharmaceutically acceptable salt of claim 26 wherein  $R^1 - R^{16}$  are hydrogen a compound having a structure of Formula (III) or a pharmaceutically acceptable salt thereof



(III)

wherein M is  $(G)_a Y[(OSi(CH_3)_2(CH_2)_b N_e(R')_d(R'')_e)X_g]_p$ ;

Y is selected from Si, Al, Ga, Ge, or Sn;

R' is selected from H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>4</sub>H<sub>9</sub>, C<sub>4</sub>H<sub>8</sub>NH, C<sub>4</sub>H<sub>8</sub>N, C<sub>4</sub>H<sub>8</sub>NCH<sub>3</sub>, C<sub>4</sub>H<sub>8</sub>S, C<sub>4</sub>H<sub>8</sub>O, C<sub>4</sub>H<sub>8</sub>Se, OC(O)CH<sub>3</sub>, OC(O), CS, CO, CSe, OH, C<sub>4</sub>H<sub>8</sub>N(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>6</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms; [[:]]

R'' is selected from H, SO<sub>2</sub>CH<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>N(CH<sub>3</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>, C(S)NHC<sub>6</sub>H<sub>11</sub>O<sub>5</sub>,

(CH<sub>2</sub>)<sub>n</sub>N((CH<sub>2</sub>)<sub>6</sub>(CH<sub>3</sub>))<sub>2</sub>, and an alkyl group having from 1 to 12 carbon atoms;

G is selected from OH and CH<sub>3</sub>;

X is selected from I, F, Cl, or Br;

a is 0 or 1;

b is an integer from 2 to 12;

e is 0 or 1;

d is an integer from 0 to 3;

e is an integer from 0 to 2;

f is 1 or 2;

g is 0 or 1;

n is an integer from 1 to 12;

o is an integer from 1 to 11; and

p is 1 or 2.

28. **(Currently amended)** [[A]] The pharmaceutically acceptable salt of claim [[17]] 27, wherein M is selected from  $\text{AlOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ ;  $\text{AlOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_3^+\text{T}^-$ ;  $\text{CH}_3\text{SiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_3^+\text{T}^-$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_3^+\text{T}^-]_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NH}_2]_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NHSO}_2\text{CH}_3]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NHSO}_2\text{CH}_3$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_2\text{CH}_3)(\text{CH}_2)_2\text{N}(\text{CH}_3)_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_4\text{NHCSNHC}_6\text{H}_{11}\text{O}_5]_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{OCOCH}_3$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{OH}$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_2\text{CH}_3)(\text{CH}_2)_2\text{N}(\text{CH}_3)_2]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{O}$ ;  $\text{AlOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}^+(\text{CH}_3)_2(\text{CH}_2)_{11}\text{CH}_3\text{I}^-$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_8\text{N}(\text{CH}_3)_2$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{O}]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{S}$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_2)_3(\text{CH}_3)_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NCS}$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}[(\text{CH}_2)_3\text{N}(\text{CH}_3)_2]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{NCH}_3$ ;  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{NCH}_3]_2$ ;  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{N}(\text{CH}_2)_3\text{CH}_3$ ; and  $\text{Si}[\text{OSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{NC}_4\text{H}_8\text{NH}]_2$ .

29. **(Currently amended)** [[A]] The pharmaceutically acceptable salt of claim [[18]] 28, wherein M is  $\text{HOSiOSi}(\text{CH}_3)_2(\text{CH}_2)_3\text{N}(\text{CH}_3)_2$ .

30. **(Cancelled)**

31. **(Currently amended)** [[A]] The salt of claim [[25]] 26, wherein the salt is the hydrochloric salt.

32. **(Currently amended)** [[A]] The salt of claim [[25]] 26, wherein the salt is the pyruvate salt.

33. **(Cancelled)**